

MLFB-Ordering data

1FK7042-5AF71-1DU5-Z
E15+G31+H61



Figure similar

Client order no. :
Order no. :
Offer no. :
Remarks :

Item no. :
Consignment no. :
Project :

Engineering data		Mechanical data	
Rated speed (100 K)	3000 rpm	Motor type	Permanent-magnet synchronous motor
Number of poles	8	Motor type	Compact
Rated torque (100 K)	2.6 Nm	Shaft height	48
Rated current	1.9 A	Cooling	Natural cooling
Static torque (60 K)	2.50 Nm	Radial runout tolerance	0.040 mm
Static torque (100 K)	3.00 Nm	Concentricity tolerance	0.08 mm
Stall current (60 K)	1.80 A	Axial runout tolerance	0.08 mm
Stall current (100 K)	2.20 A	Vibration severity grade	Grade A
Moment of inertia	3.010 kgcm ²	Connector size	1
Physical constants		Degree of protection	IP65 and DE flange IP67
Torque constant	1.40 Nm/A	Design acc. to Code I	IM B5 (IM V1, IM V3)
Voltage constant at 20° C	89.0 V/1000*min ⁻¹	Temperature monitoring	KTY84 temperature sensor in the stator winding
Winding resistance at 20° C	5.15 Ω	Electrical connectors	Connectors for signals and power rotatable
Rotating field inductance	29.0 mH	Color of the housing	Standard (Anthracite RAL 7016)
Electrical time constant	5.60 ms	Holding brake	without holding brake
Mechanical time constant	2.37 ms	Shaft end	Fitted key and keyway
Thermal time constant	30 min	Encoder system	Encoder IC22DQ: incremental encoder 22 bits (resolution 4194304, encoder-internal 2048 S/R) + commutation position 11 bits
Shaft torsional stiffness	16000 Nm/rad		
Net weight of the motor	19.9 kg		
Recommended Motor Module			
Rated inverter current	3 A		
Maximum inverter current	6 A		
Maximum torque	8.40 Nm		



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Gearbox data			
Gearbox type	Worm gear	Overload factor	2.10
Designation	S102	Type of construction	no value
Gearbox ratio	23	Mounting position	EL 6
Output speed at the gearbox shaft	130 rpm	Connector position	Connector position on gearbox side 2, top
Rated output torque at duty type S3-60 %	54 Nm	Type	Flange (round)
Acceleration torque max.	132 Nm	Gearbox shaft end	Solid shaft with fitted key
Power at duty type S3-60%	0.73 kW	Gearbox output arrangement	Gearbox side 4
Radial output shaft loading, max.	2128 N	Arrangement of shrink disk	no value
Precise ratio	162/7		

Limiting data	
Max. permissible speed (mech.)	9000 rpm
Max. permissible speed (inverter)	6500 rpm
Maximum torque	10.5 Nm
Maximum current	7.4 A

Special design	
E15	Worm geared motors
G31	Flange (round), Solid shaft with fitted key (Plug-in gearbox side 5 for parallel shaft gearboxes; plug-in side 4 for bevel and worm gearboxes)
H61	Connector position on gearbox side 2, top